Request to Archive With The National Centers for Environmental Information For AVHRR Pathfinder SST CDR v5.3 Provided by National Oceanographic Data Center

2013-12-31

This information will be used by NCEI to conduct an appraisal and make a decision on the request.

1. Who is the primary point of contact for this request?

Bob Evans

U-MIAMI/RSMAS > Rosenstiel School of Marine and Atmospheric Science, University of Miami 828-676-1288

revans@rsmas.miami.edu

2. Name the organization or group responsible for creating the dataset.

U-MIAMI/RSMAS and NODC through the GHRSST Program

3. Provide an overview summarizing the scope of data you want to archive. Describe the outputs, data variables, including their measurement resolution and coverage.

The Pathfinder Version 5.3 (PFV5.3) is the latest SST climate data record in the long running AVHRR Pathfinder SST program. It consists of L2P, L3U, and L3C and will be produced entirely at NODC, except NODC will use the v5 coefficients provided by Bob Evans. The dataset conforms to to the international Group for High Resolution SST (GHRSST) standards, GDS2.0 rev5. SST and ancillary quality, wind speeds, sea ice, land mask, and aerosol information are included in the dataset, which at L3C is produced twice daily on a global 8640 by 4300 pixel grid of nominal ~4km resolution at the equator.

4. What is the time period covered by the dataset? (YYYY-MM-DD, YYYY-MM or YYYY)

From 1981-11-01

Ongoing as continuous updates to the data record

5. Edition or version number(s) of the dataset:

5.3

6. Describe the level to which the data are processed. For example, are these unprocessed raw observations, derived parameters, quality controlled or inter-calibrated data, etc.?

L2P, L3U, and L3C SST derived from AVHRR GAC data

7. Approximate date when the dataset was or will be released to the public:

2014-06-01

8. Who are the expected users of the archived data? How will the archived data be used?

Primarily scientists (oceanographers, climatologists, researchers)

9. Has the dataset undergone user evaluation and/or an independent review process? Did NCEI participate in design reviews?

Not yet, but the dataset will likely be subjected to the international Climate Data Assessment Framework (CDAF).

10. Describe the dataset's relationship to other archived datasets, such as earlier versions or related source data. If this is a new version, how does it improve upon the previous version(s)?

Pathfinder SST version 5.3 is the successor to version 5.2. PFV5.3 corrects several shortcomings in V5.2:

- SSTs will be available for all quality levels, including quality of 0 which was left out of V5.2 due to memory issue in code
- Sun glint regions will be better included in the data
- Cloud tree tests for NOAA-7 and NOAA-19 will be consistent now with the rest of the sensors. In v5.2 they were not.
- The L2P and L3U can now include SST_dtime, though L3C still can not.
- Note: Pathfinder V5.3 still won't have SSES bias/stdv until V6

11. List the input datasets and ancillary information used to produce the data.

AVHRR GAC data

Marine winds from NCEP Reanalysis

Sea ice from OSI-SAF

Aerosols from a variety of sources.

12. List web pages and other links that provide information on the data.

File-level Metadata conform to CF 1.6, ACDD, and GHRSST standards.

Collection level metadata in ISO 1911-5.

- 13. List the kinds of documents, metadata and code that are available for archiving. For example, data format specifications, user guides, algorithm documentation, metadata compliant with a standard such as ISO 19115, source code, platform/instrument metadata, data/process flow diagrams, etc.
- CDR Program documentation and code will be provided GHRSST Data Specification 2.0 rev 5, available at http://www.ghrsst.org
- 14. Indicate the data file format(s).
- 1. netCDF-4

15. Are the data files compressed?

internal netCDF compression

16. Provide details on how the files are named and how they are organized (e.g., file_name_pattern_YYYYMM.tar in monthly aggregations).

Follows GHRSST file naming spec in the GDS 2.0 rev5

- 17. Explain how to access sample data files and/or a file listing for previewing. If it is not available now, when will it be available?
- 18. What is the total data volume to be submitted?

Historic Data: all historic data or data submitted as a completed collection.

Total Data Volume: 1TB

Number of Data Files: 677440

19. Are later updates, revisions or replacement files anticipated? If so, explain the conditions for submitting these additional data to the archive.

No additional updates, revisions or replacement data are anticipated.

20. Describe the server that will connect to the ingest server at NCEI for submitting the data.

Physical Location: Silver Springs, MD
System Name: NODC FTP server
System Owner: NOAA NODC

Additional Information:

21. What are the possible methods for submitting the data to NCEI? Select all that apply.

1. FTP PULL

You should simply point to the NODC archive, where the data will already be properly preserved.

22. Identify how you would like NCEI to distribute the data. Web access support depends on the resources available for the dataset.

1. No web access

23. Will there be any distribution, usage, or other restrictions that apply to the data in the archive?

Constraint Type	Description
Other	No one should access the data via NCDC, and in fact it should not go to
	NCDC at all since it will already be archived at NODC, which will have all
	the data services already associated with PFV5.3 as it does for PFV5.2.

24. Discuss the rationale for archiving the dataset and the anticipated benefits. Mention any risks associated with not archiving the dataset at NCEI.

Dataset must be archived for long-term stewardship per NOAA directives on data management

25. Are the data archived at another facility or are there plans to do so? Please explain.

The data will already be archived at NODC and so does not need to be archived again by NCDC.

26. Is there an existing agreement or requirement driving this request to archive? Have you already contacted someone at NCEI?

CDR Program archive requirements mandate the data be archived, but should be updated for cases like this one where the data are already formally archived by a NOAA National Data Center

27. Do you have a data management plan for your data?

No

28. Have funds been allocated to archive the data at NCEI?

No

29. Identify the affiliated research project, its sponsor, and any project/grant ID as applicable.

N/A

30. Is there a desired deadline for NCEI to archive and provide access to the data?

Archive by: 2014-03-26

Accessible by:

31. Add any other pertinent information for this request.

As stated, NCDC should need do nothing else other than point to the NODC archive holdings.